WHAT IS CLAIMED IS:

1. A signal reception apparatus in a packet data communication system transmitting and receiving a packet data channel and a packet data control channel, the apparatus comprising:

a finger for processing a multipath signal received over the packet data channel and the packet data control channel, and outputting the processed packet data channel signal and the processed packet data control channel signal;

a combiner for combining the packet data channel signal outputted from the finger in a unit of chip;

an interference cancellation section for canceling an interference signal from the combined packet data channel signal; and

a decoder for decoding an output signal of the interference cancellation section.

2. The signal reception apparatus of claim 1, further comprising a buffer for storing the packet data channel signal outputted from the combiner.

3. The signal reception apparatus of claim 1, wherein the interference cancellation section is located between the finger and the decoder.

4. The signal reception apparatus of claim 1, further comprising an interference cancellation controller for analyzing information obtained by decoding the packet data control channel and outputting an interference cancellation command signal to the interference cancellation section only when it is determined that effective packet data to be received exists in a current time slot.

5. The signal reception apparatus of claim 1 , further comprising the interference cancellation controller for outputting the interference

cancellation command signal according to a used modulation scheme in the packet data control channel information obtained by decoding the packet data control channel to the interference cancellation section, when it is determined that the effective packet data exists in the current time slot.

6. The signal reception apparatus of claim 1 , further comprising the interference cancellation controller for receiving a power ratio of signals from a desired base station to signals from other base stations, when it is determined that the effective packet data exists in the current time slot and outputting the interference cancellation command signal to the interference cancellation section only when the power ratio is higher than or equal to a predetermined threshold that is uniquely set according to a used modulation scheme .

7. The signal reception apparatus of claim 1, further comprising the interference cancellation controller for outputting the interference cancellation command signal to the interference cancellation section only when the effective packet data exists in the current time slot and a code rate of a channel coder used in a transmitter is higher than or equal to a predetermined threshold.

8. The signal reception apparatus of claim 1 , wherein the decoder comprising:

a Walsh decover for Walsh-decovering the output of interference canceller;

a metric generator for generating metrics from the output of the Walsh decover;

a deinterleaver for deinterleaving the output of the metric generator; and

a turbo decoder for turbo-decoding the output of the deinterleaver.

9. A method for canceling an interference signal in receiver for a packet data communication system in which data is transmitted and received over a packet data channel and a packet data control channel, the method comprising

the steps of:

processing a multipath signal received over the packet data channel and the packet data control channel, and outputting the processed packet data channel signal and the processed packet data control channel signal;

combining the processed packet data channel signal in a unit of chip;

reading the combined packet data channel signal and canceling an interference signal from the read packet data channel signal; and

decoding the interference-cancelled packet data channel signal.

10. The method of claim 9, further comprising the step of storing the combined packet data channel signal.

11. The method of claim 9, further comprising the step of analyzing information obtained by decoding the packet data control channel and outputting an interference cancellation command signal only when it is determined that effective packet data to be received exists in a current time slot.

12. The method of claim 11, wherein the step of outputting an interference cancellation command signal comprises the step of outputting the interference cancellation command signal according to a used modulation scheme in the packet data control channel information obtained by decoding the packet data control channel, when it is determined that the effective packet data exists in the current time slot.

13. The method of claim 11, wherein the step of outputting an interference cancellation command signal comprises the steps of:

receiving a power ratio of signals from a desired base station to signals from other base stations, when it is determined that the effective packet data exists in the current time slot; and

outputting the interference cancellation command signal only when the

power ratio is higher than or equal to a predetermined threshold that is uniquely set according to the modulation scheme used.

14. The method of claim 11, wherein the step of outputting an interference cancellation command signal comprises the step of outputting the interference cancellation command signal only when the effective packet data exists in the current time slot and a code rate of a channel coder used in a transmitter is higher than or equal to a predetermined threshold.

15. The method of claim 9, wherein the step of decoding the interference-cancelled packet data channel signal comprises the steps of:

Walsh-decovering the interference-cancelled packet data channel signal;

generating metrics from the output of the Walsh-decovered signal;

deinterleavering the metrics;and

Turbo-decoding the interference-cancelled packet data channel signal using the deinterleaved metrics.